

FIRE APPARATUS ACCESS AND FIRE LANE WORKSHEET

1. Building is limited in area? _____ (YES OR NO)
2. Building is unlimited in area based on section 507 of the IBC? _____ (YES OR NO)
3. Building is completely protected by an automatic fire sprinkler system, per IBC section 903.3.1.1 or 903.3.1.2? _____ (YES OR NO)
4. Fire lanes are unobstructed? _____ (YES OR NO)
5. Fire lanes are accessible from a public road? _____ (YES OR NO)
6. Fire lanes extend to within 150 feet of any portion of the exterior wall of the first story of the building or facility? _____ (YES OR NO)
If no, a letter from the fire code official allowing and indicating acceptance of a distance greater than 150 feet shall be submitted to the department.
7. Is any part of the building greater than 30 feet above the lowest level of the fire apparatus access? _____ (YES OR NO)
If yes, answer the following five questions:
 - a) Is fire lane parallel to one entire side of the building? _____ (YES OR NO)
 - b) Is the near edge of the fire lane within 30 feet of the building on that parallel side? _____ (YES OR NO)
 - c) Is a fire lane provided capable of accommodating aerial fire apparatus? _____ (YES OR NO)
 - d) Are overhead power or utility lines located across or within a fire lane for aerial fire apparatus? _____ (YES OR NO)
 - e) Fire apparatus access has a minimum unobstructed width of 26 feet? _____ (YES OR NO)
8. Fire apparatus access roadways have an unobstructed vertical clearance of at least 13 feet 6 inches? _____ (YES OR NO)
9. Fire lanes have an unobstructed width of at least 20 feet? _____ (YES OR NO)
10. Is a fire hydrant provided to supply fire apparatus on the fire lane? _____ (YES OR NO)
If yes, the minimum unobstructed width of the fire lane shall be at least 26 feet wide for at least 20 feet on each side of the fire hydrant.
11. The minimum inside turning radius of the fire lane is at least 28 feet? _____ (YES OR NO)
12. Is the fire lane dead-ended with a length greater than 150 feet? _____ (YES OR NO)
If yes, answer the following questions:
 - Is an area for turning around fire apparatus provided by a cul-de-sac with a minimum diameter of 70 feet? _____ (YES OR NO)
 - Is an area for turning around fire apparatus provided by a 45-degree wye with a minimum length of 60 feet per side? _____ (YES OR NO)
 - Is an area for turning around fire apparatus provided by a 90-degree tee with a minimum length of 60 feet per side? _____ (YES OR NO)

INSTRUCTIONS FOR FIRE APPARATUS ACCESS AND FIRE LANE WORKSHEET

There are several factors that need to be considered to determine compliance with section COMM 62.0500 for fire apparatus access and fire lanes. This worksheet is designed as a tool to determine if compliance is being provided.

Questions 1 and 2 are basic information to determine how the area limitations of the building or structure are being complied with. It should be noted that all buildings and structures are required to have fire apparatus access and fire lanes provided. A "yes" response is required for either question 1 or question 2. A "yes" response in question 1 or question 2 still requires completion of all portions of this worksheet. If a "yes" response is provided for question 2 it is recommended that you check for compliance with applicable requirements of section 507 of the IBC.

Question 3 is also basic information that should be carried over from the plan submittal application form and is only to be answered yes when a complete automatic fire sprinkler system is being provided, in compliance with IBC section 903.3.1.1 or 903.3.1.2. A yes or no response is required for this question.

Questions 4 and 5 deal with the fire lanes and a yes or no response must be provided. Section COMM 62.0500(1) requires that the fire lanes be unobstructed and accessible from public roads. A "no" response to this question is a violation of the code requirements. Site re-design is then required for compliance.

Question 6 provides information verifying that all portions of the exterior wall of the first story of the building or facility is within 150 feet of a fire lane. If the distance to the fire lane from any portion of the exterior wall of the first story of the building or facility is greater than 150 feet then a "no" response must be provided. In addition a statement/letter from the fire code official must be submitted to the Department clearly indicating acceptance of a distance greater than 150 feet. Without such statement, design would be in violation of section COMM 62.0500(2)(a) and revised site design would be required. Please refer to section COMM 62.0500(2) for other equivalent measures that may be applicable due to site constraints.

Question 7 provides information on the building elevations with respect to the location of the lowest level of the fire apparatus access. If any part of the building is greater than 30 feet above the lowest level of the fire apparatus access then a "yes" response must be provided and the five follow-up questions must be answered. Questions 7a through 7e require a "yes" response. If a "no" response is provided for any such questions then a code violation is present.

- * A "no" response to question 7a is a violation of section COMM 62.0500(2)(a)2.
- * A "no" response to question 7b is a violation of section COMM 62.0500(2)(a)2.
- * A "no" response to question 7c is a violation of section COMM 62.0500(3)(b).
- * A "no" response to question 7d is a violation of section COMM 62.0500(3)(b).
- * A "no" response to question 7e is a violation of section COMM 62.0500(3)(e).

If a "no" response is provided to question 7, then the five follow-up questions do not require a response as such questions would not all be applicable to this building or facility.

Question 8 provides information on the overhead clearances provided for the fire lanes. Section COMM 62.0500(3)(a) requires that fire lanes have a minimum vertical clearance of 13 feet 6 inches. A "no" response to this question is a violation of the code requirements.

Question 9 provides information on the minimum width of fire lanes. Section COMM 62.0500(3)(c) requires that fire lanes be at least 20 feet in width. A "no" response to this question is a violation of the code requirements.

Question 10 provides information as to if there is a fire hydrant provided to supply fire apparatus on the fire lane. If a "yes" response is provided to question 10, then the fire lane shall be at least 26 feet wide for a minimum distance of 20 feet on each side of the fire hydrant based on Section COMM 62.0500(3)(d). A "no" response to question 10 will not require additional code requirements for fire lanes due to no fire hydrant being provided.

Question 11 provides information on the turning radii of the fire lanes. Section COMM 62.0500(4) requires that all inside turning radii be at least 28 feet. A "no" response to this question is a violation of the code requirements. It is noted that the fire code official may accept or require a minimum inside turning radii other than 28 feet.

Question 12 provides information on fire lanes with a dead-end greater than 150 feet. Section COMM 62.0500(5) requires that all dead-end fire lanes longer than 150 feet be provided with a turnaround area. If a dead-end fire lane that is longer than 150 feet is provided then a "yes" response must be provided and the follow-up questions need to be answered. Please note that only one of the follow-up questions need to be answered "yes" in order to comply with the "turnaround" code requirements.

- * A cul-de-sac with a minimum diameter of 70 feet is acceptable per section COMM 62.0500(6)(a) for a turnaround,
- * A 45 degree wye with a minimum length of 60 feet per side is acceptable per section COMM 62.0500(6)(b) for a turnaround, and
- * A 90-degree tee with a minimum length of 60 feet per side is acceptable per section COMM 62.0500(6)(c) for a turnaround.

If a "yes" response is provided in question 12 and a "no" response is provided for **ALL** of the follow-up questions then the design is in violation of the code requirements.

**EXAMPLE 1 OF FIRE APPARATUS
AND FIRE LANE WORKSHEET:**

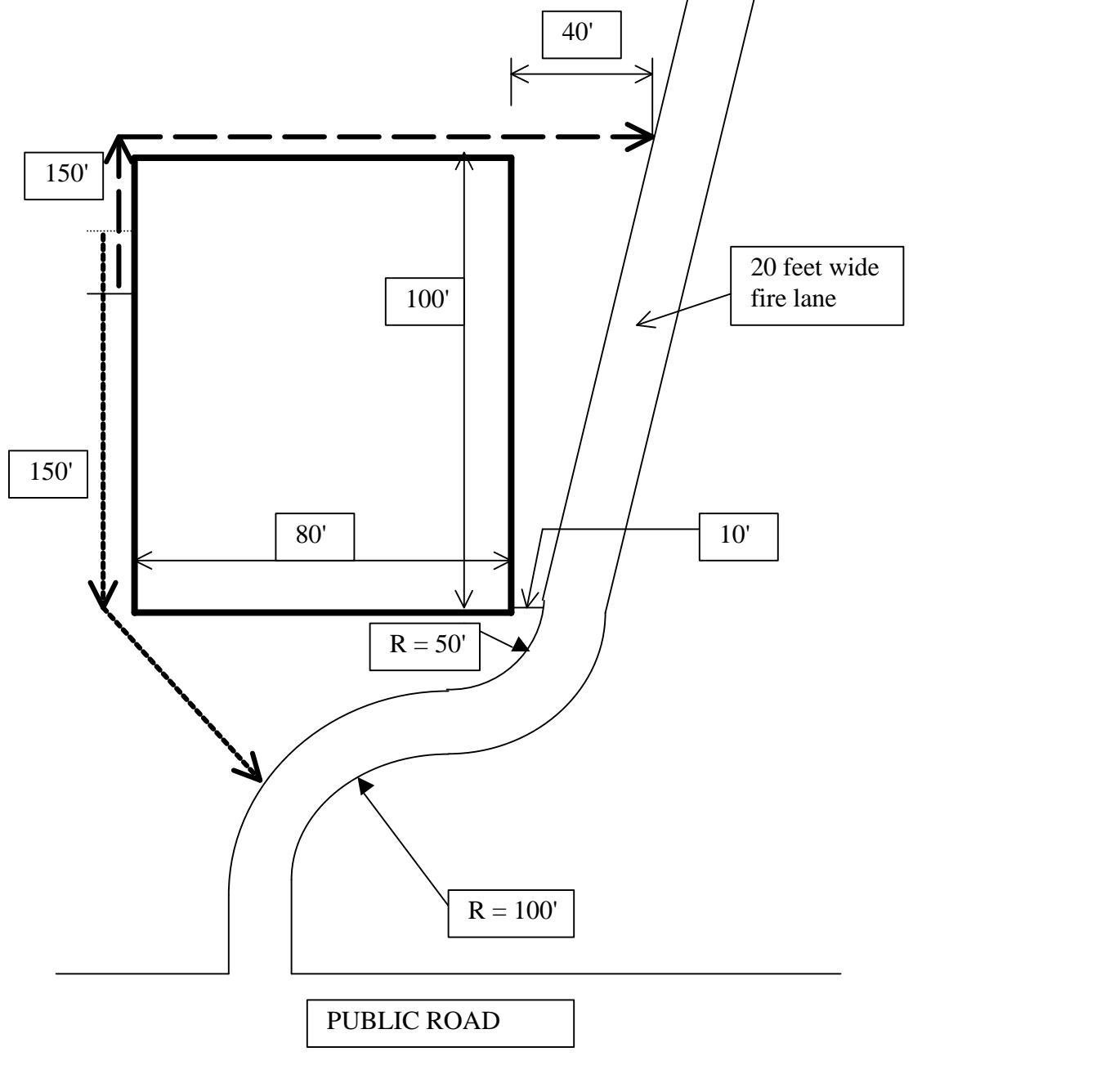
For the given information complete the fire lane worksheet:

One story Group M occupancy,

Type VB construction with a floor area of 8000 sq. ft,

Not protected by a sprinkler system, and

All portions of building is located not more than 16 ft above the lowest point of the fire lane.



FIRE APPARATUS ACCESS AND FIRE LANE WORKSHEET

1. Building is limited in area? YES (YES OR NO)
2. Building is unlimited in area based on section 507 of the IBC? NO (YES OR NO)
3. Building is completely protected by an automatic fire sprinkler system, per section 903.3.1.1 or 903.3.1.2? NO (YES OR NO)

4. Fire lanes are unobstructed? YES (YES OR NO)

Complies with section 62.0500(1)

5. Fire lanes are accessible from a public road? YES (YES OR NO)

Complies with section 62.0500(2)(a)

6. Fire lanes extend to within 150 feet to any portion of the exterior wall of the first story of the building or facility? YES (YES OR NO)

If no, a letter from the fire code official allowing and indicating acceptance of a distance greater than 150 feet shall be submitted to the department.

Not applicable

7. Is any part of the building greater than 30 feet above the lowest level of the fire apparatus access? NO (YES OR NO)

If yes, answer the following five questions:

- a) Is fire lane parallel to one entire side of the building? _____ (YES OR NO)
- b) Is the near edge of the fire lane within 30 feet of the building on that parallel side? _____ (YES OR NO)
- c) Is a fire lane provided capable of accommodating aerial fire apparatus? _____ (YES OR NO)
- d) Are overhead power or utility lines located across or within a fire lane for aerial fire apparatus? _____ (YES OR NO)
- e) Fire apparatus access has a minimum unobstructed width of 26 feet? _____ (YES OR NO)

Not applicable

8. Fire apparatus access roadways have an unobstructed vertical clearance of at least 13 feet 6 inches?

YES (YES OR NO)

Complies with section 62.0500(3)

9. Fire lanes have an unobstructed width of at least 20 feet? YES (YES OR NO)

Complies with section 62.0500(3)(c)

10. Is a fire hydrant provided to supply fire apparatus on the fire lane? NO (YES OR NO)

If yes, the minimum unobstructed width of the fire lane shall be at least 26 feet wide for at least 20 feet on each side of the fire hydrant.

Not applicable

Complies with section 62.0500(4)

11. The minimum inside turning radius of the fire lane is at least 28 feet? YES (YES OR NO)

12. Is the fire lane dead-ended with a length greater than 150 feet? NO (YES OR NO)

Complies with section 62.0500(5)

If yes, answer the following questions:

Is an area for turning around fire apparatus provided by a cul-de-sac with a minimum diameter of 70 feet? _____ (YES OR NO)

Is an area for turning around fire apparatus provided by a 45-degree wye with a minimum length of 60 feet per side? _____ (YES OR NO)

Is an area for turning around fire apparatus provided by a 90-degree tee with a minimum length of 60 feet per side? _____ (YES OR NO)

Not applicable

FIRE APPARATUS ACCESS AND FIRE LANE WORKSHEET

- 1) Building is limited in area? YES (YES OR NO)
- 2) Building is unlimited in area based on section 507 of the IBC? NO (YES OR NO)
- 3) Building is completely protected by an automatic fire sprinkler system? NO (YES OR NO)
- 4) Fire lanes are unobstructed? YES (YES OR NO) Complies with section 62.0500(1)
- 5) Fire lanes are accessible from a public road? YES (YES OR NO) Complies with section 62.0500(2)(a)
- 6) Fire lanes extend to within 150 feet to any portion of the exterior wall of the first story of the building or facility? YES (YES OR NO)
If no, a letter from the fire code official allowing and indicating acceptance of a distance greater than 150 feet shall be submitted to the department. Not applicable
- 7) Is any part of the building greater than 30 feet above the lowest level of the fire apparatus access?
YES (YES OR NO)
If yes, answer the following five questions:
a) Is fire lane parallel to one entire side of the building? YES (YES OR NO)
b) Is the near edge of the fire lane within 30 feet of the building on the parallel side? YES (YES OR NO) Complies with section 62.0500(2)(a)2
c) Is a fire lane provided capable of accommodating aerial fire apparatus? YES (YES OR NO)
d) Are overhead power or utility lines located across or within a fire lane for aerial apparatus? NO (YES OR NO) Complies with section 62.0500(3)(b)2
e) Fire apparatus access has a minimum unobstructed width of 26 feet? NO (YES OR NO)
- 8) Fire apparatus access roadways have an unobstructed vertical clearance of at least 13 feet 6 inches?
YES (YES OR NO) Complies with section 62.0500(3) Does not comply with 62.0500(3)(e)
- 9) Fire lanes have an unobstructed width of at least 20 feet? YES (YES OR NO)
Complies with section 62.0500(3)(c) but note that section 62.0500(3)(e) requires 26 feet wide fire lanes
- 10) Is a fire hydrant provided to supply fire apparatus on the fire lane? NO (YES OR NO)
If yes, the minimum unobstructed width of the fire lane shall be at least 26 feet wide for at least 20 feet on each side of the fire hydrant. Not applicable Complies with section 62.0500(4)
- 11) The minimum inside turning radius of the fire lane is at least 28 feet? YES (YES OR NO)
- 12) Is the fire lane dead-ended with a length greater than 150 feet? YES (YES OR NO)
If yes, answer the following questions:
Is an area for turning around fire apparatus provided by a cul-de-sac with a minimum diameter of 70 feet? NO (YES OR NO)
Is an area for turning around fire apparatus provided by a 45-degree wye with a minimum length of 60 feet per side? NO (YES OR NO)
Is an area for turning around fire apparatus provided by a 90-degree tee with a minimum length of 60 feet per side? NO (YES OR NO)
Since no turnaround is provided for the dead-end fire lane section 62.0500(5) is in violation.

NOTE: Example 2 has two non-compliant conditions.

1. Since a portion of the building is greater than 30 feet above the lowest level of fire apparatus access, the fire lane needs to be at least 26 feet in width {section 62.0500(3)(e)}. It should also be noted that the **YES** answer for question 9 would indicate compliance with the general width requirement of 20 feet based on section 62.0500(3)(c) but since section 62.0500(3)(e) is more restrictive, the 26 feet wide requirement must be complied with.
2. Since a dead-end fire lane greater than 150 feet is provided, an area for turning around fire apparatus must be provided per section 62.0500(5). There are three options that can be used for compliance. They are a:
 - * Cul-De-Sac,
 - * 45 degree wye, or
 - * 90 degree tee.

Only one of the three above mentioned methods of turnarounds need to be provided.

